

CLAIMS

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1. An image generating system which generates a three-dimensional image of an object formed of a polygon, comprising:
means which scissors a polygon arranged in a three-dimensional space in an arbitrary plane to generate a new vertex for specifying the scissored polygon; and
means which generates an image of an object formed of the polygon containing the new vertex.
 2. The image generating system as defined in claim 1,
wherein a polygon containing a vertex which is out of a drawable range is scissored at a portion containing the vertex, in a predetermined plane.
 3. The image generating system as defined in claim 1,
wherein a polygon is scissored in a plane which specifies a viewing angle range.
 4. The image generating system as defined in claim 2,
wherein a polygon is scissored in a plane which specifies a viewing angle range.
 5. The image generating system as defined in claim 1,
wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

5 6. The image generating system as defined in claim 2,
wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

7. The image generating system as defined in claim 3,
wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

8. The image generating system as defined in claim 4,
wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

9. A computer-usable program embodied on an information storage medium or in a carrier wave, comprising a program for implementing:

5 means which scissors a polygon arranged in a three-dimensional space in an arbitrary plane to generate a new vertex for specifying the scissored polygon; and

means which generates an image of an object formed of a polygon containing the new vertex.

10. The program embodied on an information storage medium or in a carrier wave as defined in claim 9,

wherein a polygon containing a vertex which is out of a drawable range is scissored at a portion containing the vertex, in a predetermined plane.

11. The program embodied on an information storage medium or in a carrier wave as defined in claim 9,

wherein a polygon is scissored in a plane which specifies a viewing angle range.

12. The program embodied on an information storage medium or in a carrier wave as defined in claim 10,

wherein a polygon is scissored in a plane which specifies a viewing angle range.

13. The program embodied on an information storage medium or

in a carrier wave as defined in claim 9,

wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

5 wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

14. The program embodied on an information storage medium or in a carrier wave as defined in claim 10,

wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

15 wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

15. The program embodied on an information storage medium or in a carrier wave as defined in claim 11,

20 wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

25 wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

16. The program embodied on an information storage medium or

in a carrier wave as defined in claim 12,

wherein a polygon arranged in a three-dimensional space is subjected to coordinate transformation into a screen coordinate system, to detect an undrawable vertex; and

5 wherein the polygon containing the detected vertex is scissored at a portion containing the detected vertex in a predetermined plane.

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